

**TRAFFIC-INDEPENDENT ALLOCATION OF WORKING AND  
RESTORATION CAPACITY IN NETWORKS**

**ABSTRACT OF THE DISCLOSURE**

5       A given network of nodes that are interconnected by links having corresponding  
capacities has each link's capacity divided into working capacity and restoration capacity  
without *a priori* information about network traffic characteristics. Allocation of working  
capacity and restoration capacity for the network might be optimized by characterization  
of the network in accordance with a linear programming problem (LPP) subject to  
network constraints and then generating a solution to the LPP either exactly or with an  
10   approximation. Partitioning the capacity of each link in the network into working and  
restoration capacities minimizes the restoration capacity overhead in the network to allow  
for higher network utilization.